

Date: Monday, 11/28/2005 10:21:23 AM  
 User: Linda Lacelle

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : SADDLE, INBOARD, RS, 206  
 Job Number : 24582  
 Estimate Number : 10821  
 P.O. Number : N/A Part Number : D26662  
 This Issue : 11/28/2005 S.O. No. : N/A Drawing Number : D2666 REV. B  
 Prsht Rev. : NC Project Number : N/A  
 First Issue : N/A Type : MACHINED PARTS Drawing Revision : B  
 Previous Run : 23923 Material : N/A  
 Written By : See Comment below Due Date : 12/5/2005 Qty: 4 Um: Each  
 Checked & Approved By : See Comment below  
 Comment : Est: C 00.11.01 Removed P/O for Powder Coat - in house processEC

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	D6101001	7075-T7351 2X6X6.25 BATCH No. B24890 ML 06/01/09 4
2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1



## Comment: HAAS CNC VERTICAL MACHINING #1

Program batch number.

1-Inspect part number and batch number are programmed correctly. ML 06/01/09

2-Fixturing W/O No. N/A

3-Fixturing Inspection last completed on 06/01/09 by ML

4-Machine Step No 1 of Folio and visually inspect as per attached Dimension Sheet

5-Machine Step No 2 of Folio and visually inspect as per attached Dimension Sheet

6-Machine Step No 3 of Folio and visually inspect as per attached Dimension Sheet

7- Deburr En 06/01/09

En 06/01/09 4

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
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## Comment: CONVENTIONAL MILLING MACHINE

Machine Keyway and inspect per attached dimension sheet

En 06/01/13 4

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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## Comment: INSPECT PARTS AS THEY COME OFF MACHINE

En 06/01/13 4

5.0	QC8	SECOND CHECK
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## Comment: SECOND CHECK

JL 06-01-13 4

Date: Monday, 11/28/2005 10:21:24 AM  
User: Linda Lacelle

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE, INBOARD, RS, 206

Job Number: 24582

Part Number: D26662

Job Number:



Seq. #:	Machine Or Operation:	Description :
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6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

SAD 06301314

4

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

MM

06 01 16

4

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 367

PC 6/1/17

(4)

10.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

SAD 06/01/18

(4)

SD

06/01/18

(4)

Job Completion



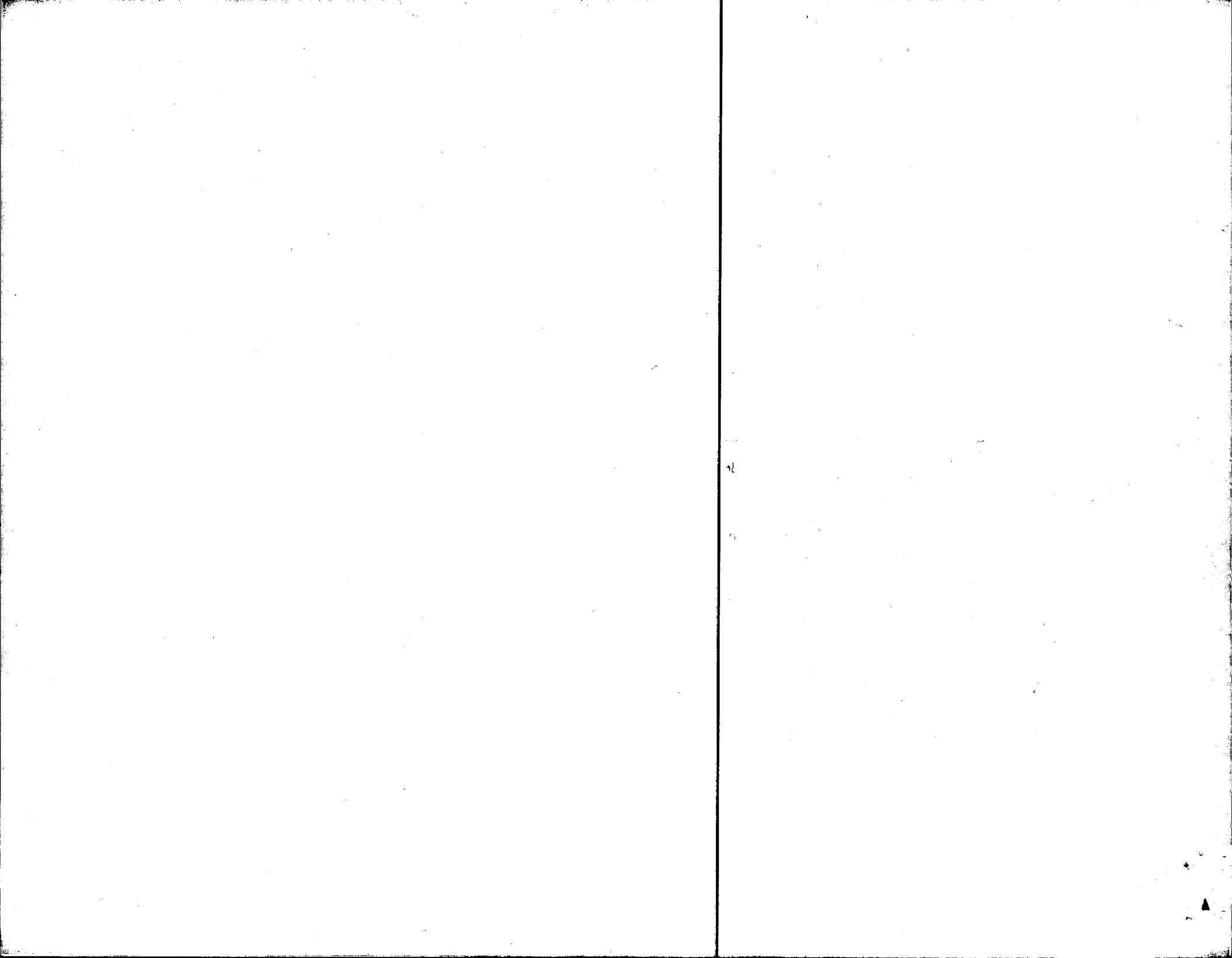
DSI AEROSPACE LTD		Work Order:	24582
Description: 206 Saddle, Inboard, Right side		Part Number:	D2666-2
Inspection Dwg: D2666 Rev. B		Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2666 Rev. B and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.100	0.140		0.120	0.124	0.124	0.127		
B	0.100	0.140		0.125	0.126	0.127	0.125		
C	0.100	0.140		0.117	0.117	0.118	0.123		
D	0.210	0.230		0.225	0.220	0.220	0.221		
E	1.245	1.255		1.245	1.245	1.247	1.247		
F	1.245	1.255		1.245	1.245	1.247	1.247		
G	5.990	6.010		6.002	6.002	6.003	6.002		
H	0.510	0.515		0.512	0.512	0.512	0.512		
I	1.674	1.684		1.678	1.679	1.677	1.679		
J	2.495	2.505		2.499	2.500	2.499	2.499		
K	0.257	0.262	DT8683	0.259	0.259	0.259	0.255		
L	0.312	0.317	DT8686	0.312	0.312	0.312	0.312		
M	0.235	0.240		0.237	0.238	0.237	0.237		
N	0.100	0.140		0.120	0.117	0.116	0.117		
O	0.540	0.560		0.545	0.545	0.545	0.545		
P	0.490	0.510		0.496	0.496	0.496	0.497		
Q	3.609	3.619		3.612	3.612	3.611	3.612		
R	2.470	2.510		2.495	2.496	2.496	2.496		
S	0.240	0.270		0.251	0.251	0.251	0.251		
T	0.100	0.180		0.140	0.140	0.140	0.140		
U	0.313	0.318	DT8686	0.318	0.318	0.318	0.318		
V	1.125	1.145		1.135	1.131	1.131	1.131		
W	1.565	1.585	DT8695 A/B	—	—	—	—		
X									
Y									
Z									
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

Measured by: <u>EP</u>	Audited by: <u>JI</u>
Date: <u>06/01/09</u>	Date: <u>06.01.13</u>

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	99.04.19	Incorporated DSI 9095, DSI 9102 & DSI 9122 Rev. A	RF	
C	99.11.10	Added Dim. R-T	RF	
D	02.12.12	Reformat; Added Dim. U-W & DT8683, DT8686 & DT8695 A/B	KJ/RF	



# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: 28 Date: 06/01/09  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06.01.09	2	There is a 0.030" x 0.095" chamfer on the lower edge of the saddle, below where the slot for the skid tube ridge	CP 06.01.09 per QSI 042	Parts are OK	E.D 06/01/09	<u>2</u> 06-01-09	CP 06-01-09 per QSI 042	<u>2</u> 06-01-09

NOTE: Date & initial all entries

## Chris Provencal

---

**From:** David Shepherd [davids@dartaero.com]  
**Sent:** January 9, 2006 5:18 PM  
**To:** Chris Provencal  
**Subject:** Re: Saddle NCR

Chris,

I think the 0.030 x 0.095 chamfer described below is acceptable because this still leaves about 0.220" of material below the saddle slot. Therefore, these parts are acceptable.

David

----- Original Message -----

**From:** "Chris Provencal" <cprovencal@dartaero.com>  
**To:** <davids@dartaero.com>  
**Sent:** Monday, January 09, 2006 2:51 PM  
**Subject:** Saddle NCR

> David,

>

> The problem is regarding the D2666-2 saddles. There's qty (3) like the  
> picture from the previous email. There is a chamfer that was put on the  
> bottom edge, near the slot for the skidtube ridge. The chamfer is 0.030"  
> towards the slot for the skidtube ridge, and I measure 0.095" along the  
> bottom edge.

>

>

>

> Sincerely,  
> Chris Provencal  
> DART Aerospace Ltd.  
> Email..cprovencal@dartaero.com  
> Phone...613-632-3336  
> Fax.....613-632-4443

>

>

5/43

(7)

<b>DART AEROSPACE LTD.</b>	<b>Work Order :</b>	<b>24582</b>
<b>Description:</b> 206 Saddle, Inboard, Right Side	<b>Part Number:</b>	<b>D2666-2</b>
<b>Drawing:</b> D2666 Rev. B	<b>Qty:</b>	<b>4</b>

Step	Location	Procedure	By	Date	Qty
1	EXPEDITING	Issue Work Order <i>Dwg. not required RF 02/09/16</i>	<i>PA</i>	05.10.18	4
2	STORES	Issue material from stock: 7075-T7351 Cut Size 2.0 x 6.25 X 6.0 Grain Along Long 6.0 Length (D6101-001) RF 02/09/16 Batch No: <i>BZ4890</i>	<i>ML</i>	06/01/09	4
3	HAAS	Program part number and batch number.	<i>ML</i>	06/01/09	4
4	QC	Inspect part number and batch number are programmed correctly.	<i>MB</i>	06/01/09	4
5	HAAS	Fixturing W/O No. <i>N/A</i> Fixturing Inspection last completed <i>06/01/09</i> by <i>ML</i>	<i>ML</i>	06/01/09	4
6	HAAS	Machine Step No 1 of Folio and visually inspect as per attached Dimension Sheet	<i>En</i>	06/01/09	4
7	HAAS	Machine Step No 2 of Folio and visually inspect as per attached Dimension Sheet	<i>En</i>	06/01/09	4
8	HAAS	Machine Step No 3 of Folio and visually inspect as per attached Dimension Sheet	<i>En</i>	06/01/09	4
9	LAGUN	Machine Keyway and inspect per attached dimension sheet	<i>En</i>	06/01/13	4
10	METAL	Deburr	<i>En</i>	06/01/09	4
11	QC	Inspect Level 1	<i>En</i>	06/01/13	4
12	QC	Inspect Level 8	<i>J.L</i>	06.01.13	4
13	METAL	Acid etch and Alodine as per QSI 005 4.1	<i>SAD</i>	06.01.14	4
14	FINISHING	Powder Coat High Gloss White (4.3.5.1) per Dart QSI 005 4.3	<i>ML</i>	06.01.16	4
15	QC	Inspect Level 3			
16	STORES	Pack in foam, identify and stock.			
17	EXPEDITING	Close Work Order Job Cost / Part			

Rev	Date	Change	Created By	Approved
A	97.07.24	New Issue		
B	98.09.08	Inspection levels, added powder coat	KS	
C	00.11.01	Removed P/O for Powder Coat - in house process	EC	<i>h.</i>

Do not  
Separate  
the two  
work orders

**RELEASED**  
*EC* DEC 18 2000

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr		Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_

NOTE: Date & initial all entries

NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_



<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	24582
<b>Description:</b> 206 Saddle, Inboard, Right side	<b>Part Number:</b>	D2666-2
<b>Inspection Dwg:</b> D2666 Rev. B		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2666 Rev. B and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.100	0.140							
B	0.100	0.140							
C	0.100	0.140							
D	0.210	0.230							
E	1.245	1.255							
F	1.245	1.255							
G	5.990	6.010							
H	0.510	0.515							
I	1.674	1.684							
J	2.495	2.505							
K	0.257	0.262	DT8683						
L	0.312	0.317	DT8686						
M	0.235	0.240							
N	0.100	0.140							
O	0.540	0.560							
P	0.490	0.510							
Q	3.609	3.619							
R	2.470	2.510							
S	0.240	0.270							
T	0.100	0.180							
U	0.313	0.318	DT8686						
V	1.125	1.145							
W	1.565	1.585	DT8695 A/B						
X									
Y									
Z									
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

See *WIP* w/10's

Measured by:	<i>CP</i>
Date:	06/01/13

Audited by:	JL
Date:	06.01.13

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	99.04.19	Incorporated DSI 9095, DSI 9102 & DSI 9122 Rev. A	RF	
C	99.11.10	Added Dim. R-T	RF	
D	02.12.12	Reformat; Added Dim. U-W & DT8683, DT8686 & DT8695 A/B	KJ/RF	<i>RF</i>

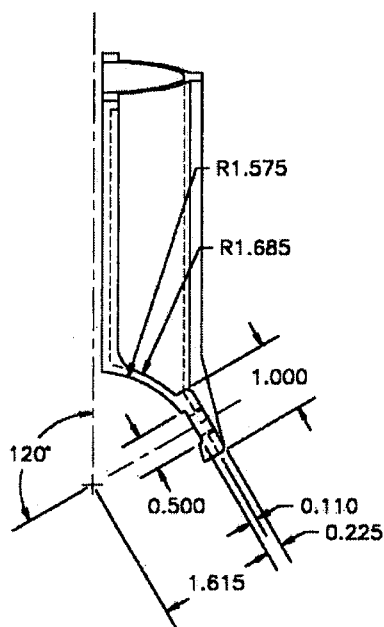
**DART**

DESIGN <i>MEY</i>	DRAWN BY <i>KE</i>	DART AEROSPACE USA, INC. FAIRCHILD INTERNATIONAL AIRPORT, WA	
CHECKED <i>MEY</i>	APPROVED <i>KS</i>	DRAWING NO. D2666	REV. B SHEET 1 OF 1
DATE 97.07.11		TITLE SADDLE FWD INSIDE HIGH	SCALE 2:5
A	97.03.25	NEW ISSUE	
B	97.07.11	ANGLE AND NOTES ADDED	

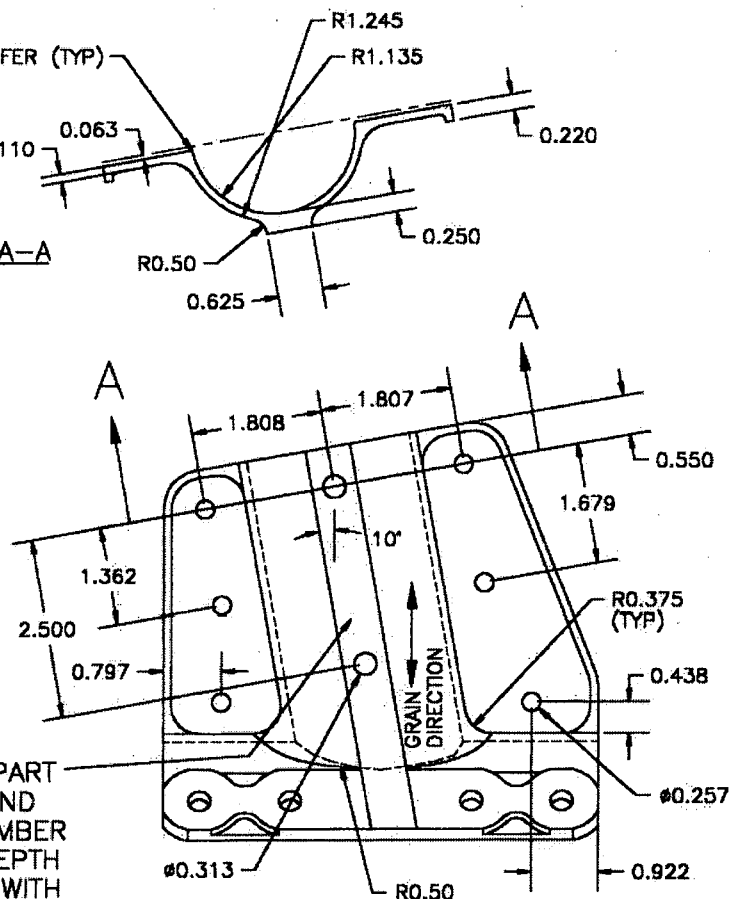
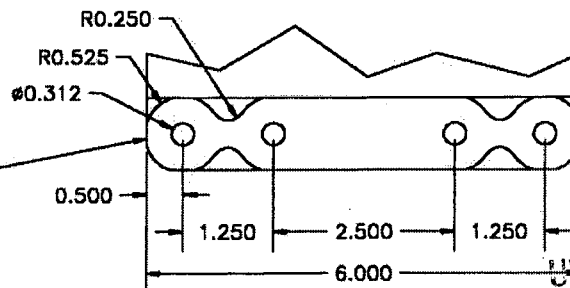
EFFECTIVE	DEOs
9095 97/11/06 DS	9122 98/12/14
9102 98/05/04 DS	

0.050 x 45° CHAMFER (TYP)

SECTION A-A



ENGRAVE PART  
NUMBER AND  
BATCH NUMBER  
TO MAX DEPTH  
OF 0.010 WITH  
MIN RADIUS  
OF 0.010

0.050 x 45° CHAMFER  
ALL AROUND**RELEASED**  
97/07/16 DS

ECN 008

#CP00.0505

MATERIAL: ~~7075-T651~~ OR 7075-T7351 (QQ-A-250/12)  
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1  
PRIME, PAINT (EXCEPT BORES) PER DART QSI 005 4.2  
NOTE: D2666-1 SHOWN (D2666-2 IS OPPOSITE)  
BREAK ALL SHARP EDGES 0.010 TO 0.020  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

SHOP COPY  
RETURN TO  
ENGINEERING

UNCONTROLLABLE COPY  
SUBJECT 1  
WITH CO.

WORK ORDER  
NO. 24582

# Job Costing Report

Dart Aerospace Ltd.  
Hawkesbury

Oct 18, 2005  
08:23 am

Work Order No	: 0024582	Department Code:	
Project Name	: D2666-2	Burden Flags	: NNNNNNNN
Project For	: WK543	WO Status	: Open
Work Order Type	: Main	Invoice State	: Not Invoiced
Main WO Number	:	Invoice Date	:
House Part Number	: D2666-2	Invoice Number	:
Description	: Saddle, RH, Fwd,Aft, In	Invoice Amount	: 0.00
Manufactured	: Yes		
Amount Req'd	: 4	Order Entry No	:
Amount Done	: 0	OE Value	: 0.00
Start Date	: 10-17-05		
Est Finish Date	: 10-25-05	Est Mark Up	: 0.000%
Act Finish Date	:	Actual Mark Up	: 0.000%
Drawings Req'd	: No		
Ok for Approval	:		
Approval Rec'd	:	\$0 Posted to Finished Goods	

	Estimated	Actual	Var. %	Posted	To Post
Material Cost	: 0.00	0.00	0.00	0.00	0.00
Engineering Hours	: 0.00	0.00	0.00		
Engineering Cost	: 0.00	0.00	0.00	0.00	0.00
Production Hours	: 0.00	0.00	0.00		
Production Cost	: 0.00	0.00	0.00	0.00	0.00
Packaging Hours	: 0.00	0.00	0.00		
Packaging Cost	: 0.00	0.00	0.00	0.00	0.00
OverHead Hours	: 0.00	0.00	0.00		
OverHead Cost	: 0.00	0.00	0.00	0.00	0.00
CNC Hours	: 0.00	0.00	0.00		
CNC	: 0.00	0.00	0.00	0.00	0.00
Misc. Hours	: 0.00	0.00	0.00		
Misc.	: 0.00	0.00	0.00	0.00	0.00
Burden	: 0.00	0.00	0.00		
Total Cost	: 0.00	0.00	0.00		
Mark up	: 0.000	0.000			
Selling Cost	: 0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done	: 0.00	0.00
Profits/(Loss)	: 0.00	0.00